

*Objects*

*Labels*

*Rules*

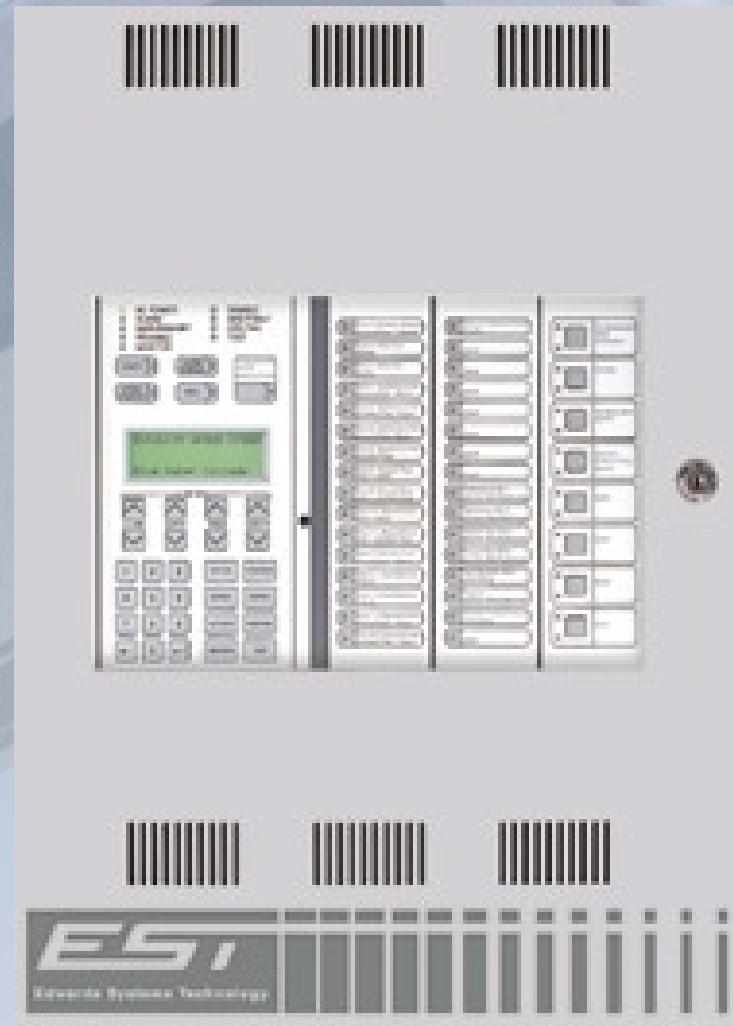
# EST2 System Components

EST2 Networking

SDU Programming

# **2-WB wall box**

**2-  
WBD  
inner and  
outer  
door**



# **2-WB**

**2-PPS**

**2-MCM(N)**

**2-LCX**

**Battery**

**2-WB Cabinet  
Supports:**

**1 ea. 2-PPS**

**1 ea. 2-MCD or 2-  
MCMN**

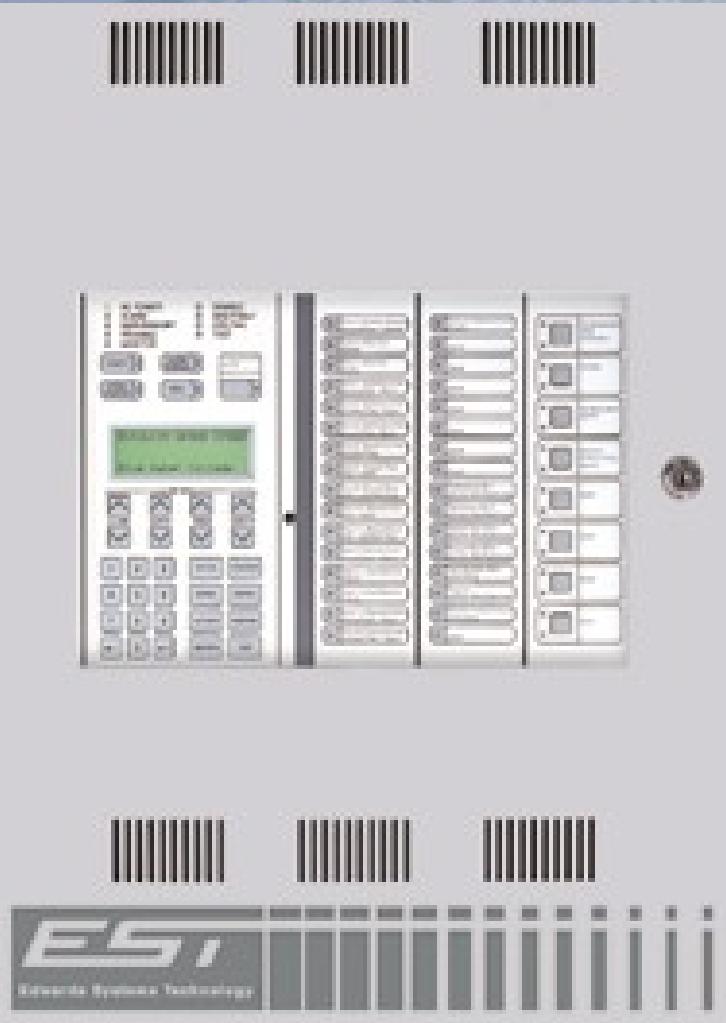
**1 ea. 2-LCX  
(optional)**

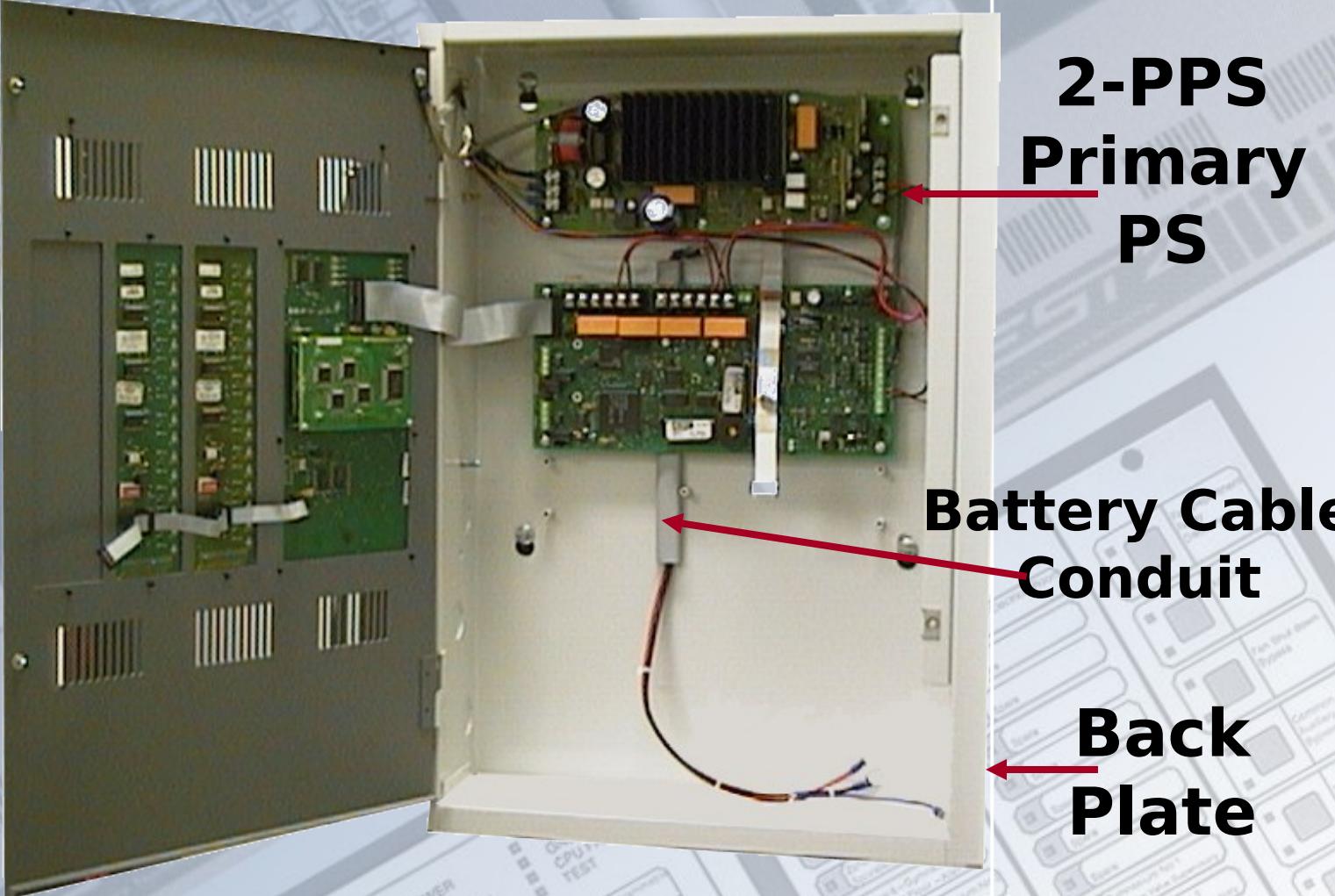
# **2-WBD**

## **2-WBD Outer and Inner Doors support:**

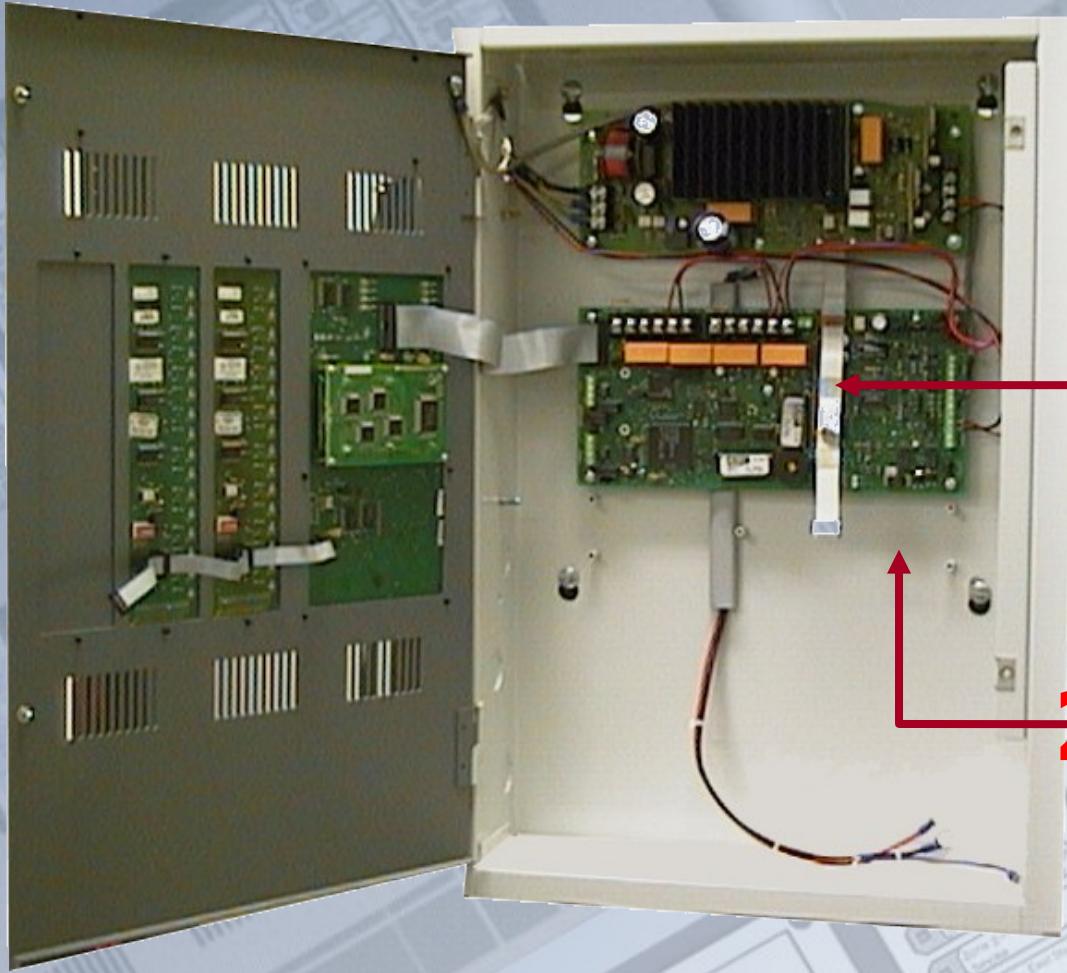
**1 ea. 2-LCD** (included  
with the 2-MCD; optional  
with the 2-MCMN)

**3 ea. LED/Switch  
Modules**





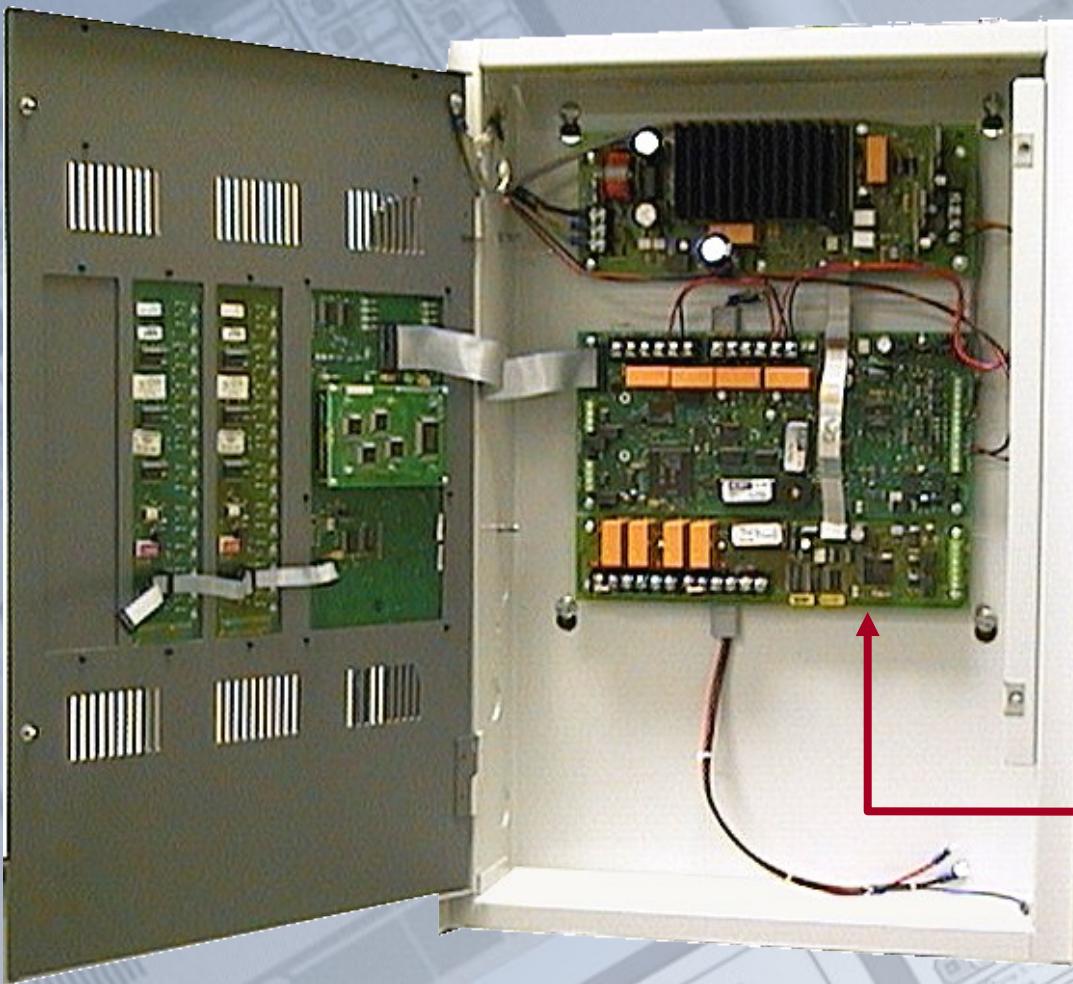
**2-WB**



Ribbon  
Cable

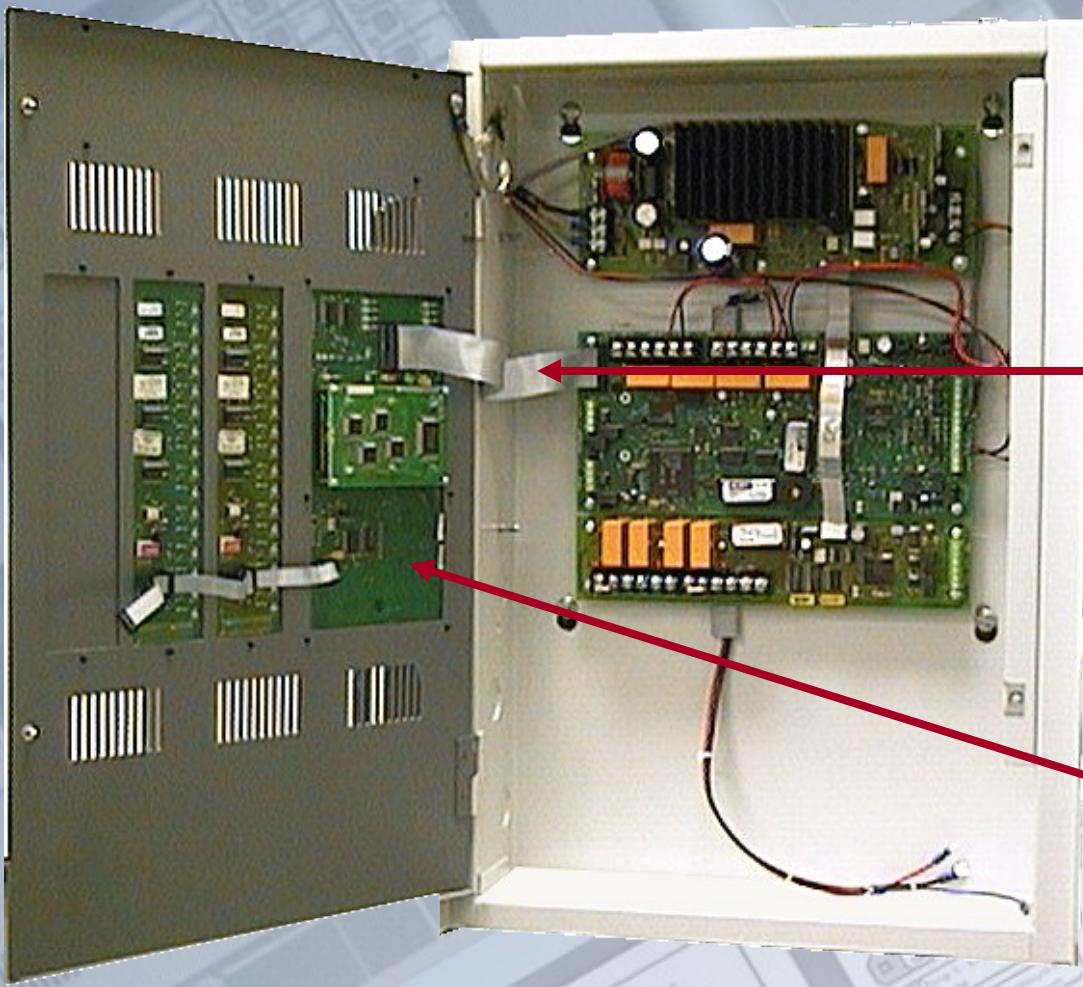
2-MCM(N)

The 2-MCM is the Main Control Module. It contains the Main CPU and Signature Loop Controller. It connects to the 2-PPS via a ribbon cable. The 2-MCM has two onboard hardwired NAC circuits. It also supports one Signature Data Line with up to 96 Detectors and 94 Module Addresses.



**2-LCX**

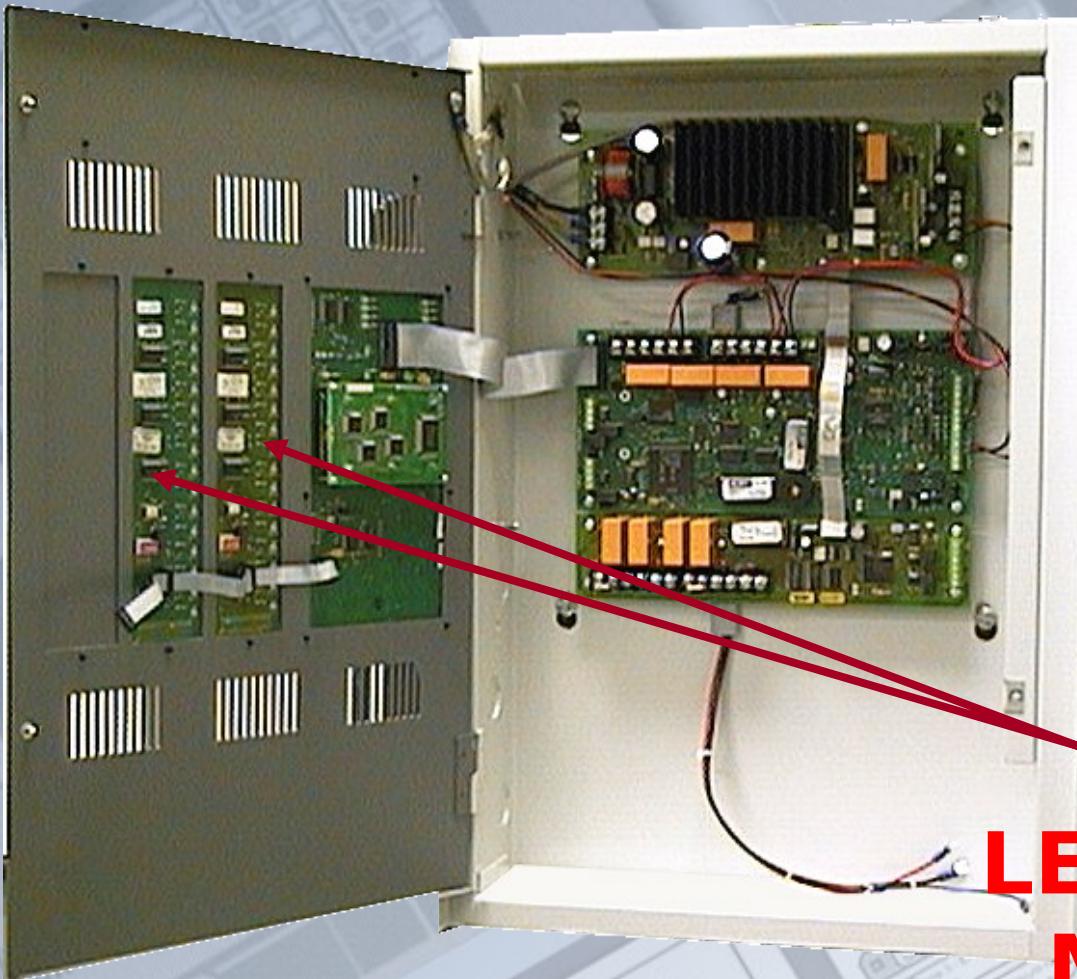
The 2-LCX Expander Loop Module is a add-on module if you require more points than the 2-MCM can support. It contains a **Signature Loop Controller**. The 2-LCX supports an additional **Signature Data Line with 96 Detectors and 94 Modules**. It also provides 2 hardwired NAC circuits.



**Ribbon  
Cable**

**2-LCD**

The 2-LCD Display, which provides operator interface, is mounted on the inner door. It is connected to the 2-MCM via a ribbon cable.



## **LED LED/Switch Modules**

**Up to 3 LED Annunciator Modules or LED/Switch Modules may be installed on the Inner Door of the WB and WB3. Blank plates are available to fill in unused spaces.**

# 2-WB3

## SUPPORTS

1. Up to 3 LED or LED/Switch Modules.
2. Either the 2-TEL or 2-MIC Module.
- 3.3 Option Modules  
(2-LCX, 2-AAC, SIGA-AAxx  
Amplifier).



# **2-WB3**

**2-PPS**

**2-MCM(N)**

**2-LCX**

**2-AAC**

**SIGA\_AAxx**

**Battery**

**2-WB3 Cabinet  
supports:**

**1 ea. 2-PPS**

**1 ea. 2-MCD or MCMN**

**1 ea. 2-LCX (optional)**

**1 ea. 2-AAC**

**1 ea. SIGA-AAxx**

# **2- WB3D**

**2-WB3D Inner and  
outer doors support:**

**1 ea. 2-LCD**

**3 ea. LED/Switch  
Modules**

**1 ea. 2-TEL or 2-MIC**



**EST2**  
Edwards Systems Technology

# **2-WB7**

## **SUPPORTS**

- 1. Up to 6 LED/Switch Modules.**
- 2. Both the 2-TEL or 2-MIC Module.**
- 3. MCM or SIGA-APS Auxiliary PS**
- 4. 6 Option Modules  
(2-LCX, 2-AAC, SIGA-AAxx Amplifier).**



**2-PPS**

**2-PPS or  
APS**

**2-MCMN**

**2-LCX**

**2-AAC**

**SIGAAAxx SIGAAAxx**

**Battery**

**2-WB7**

**2-WB7 Cabinet  
supports a  
combination of  
modules as  
diagrammed**

# **2-WB7D**

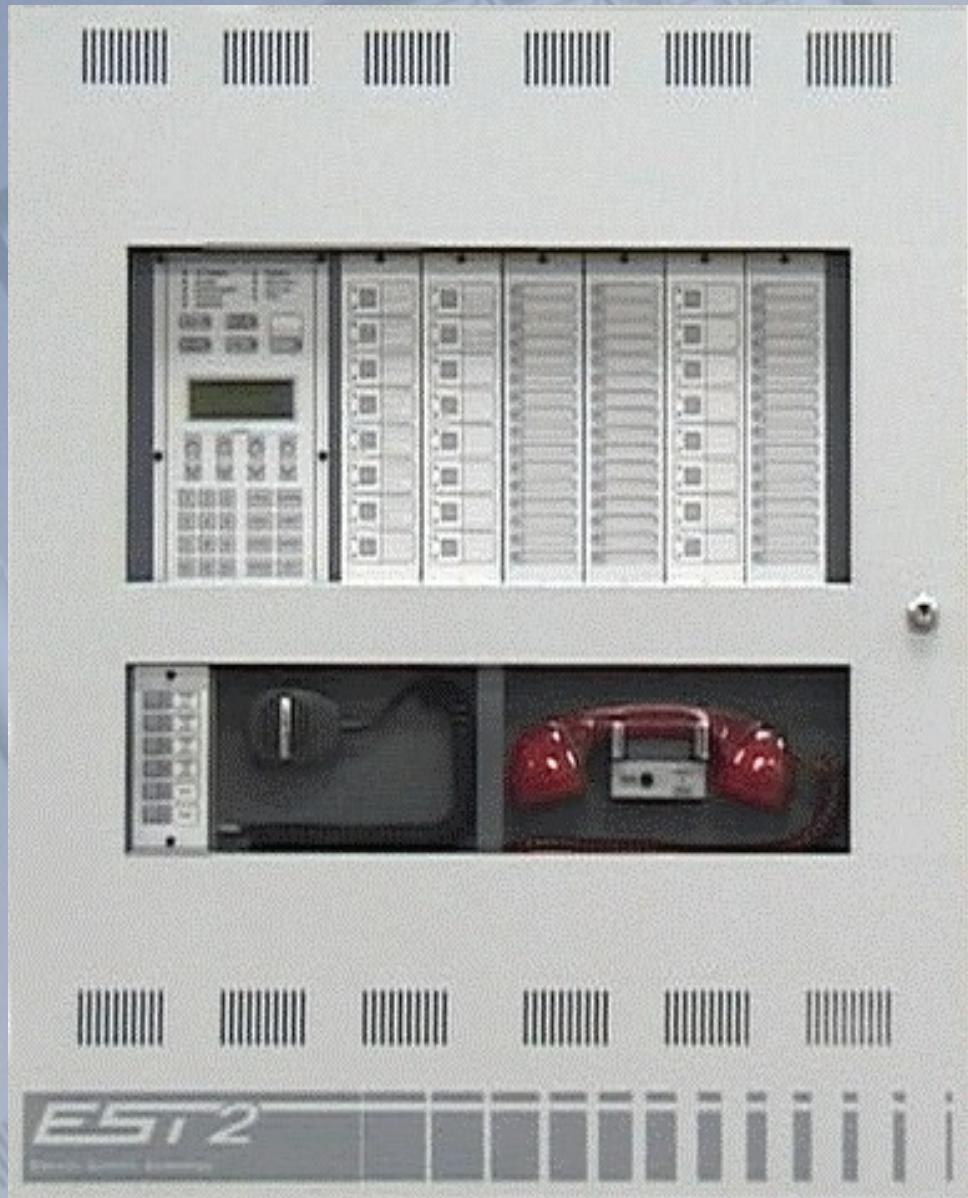
**2-WB7D Inner and  
outer doors  
support:**

**1 ea. 2-LCD**

**6 ea. LED/Switch  
Modules**

**1 ea. 2-TEL**

**1 ea. 2-MIC**



# RACCR

- RACCR
  - A Remote Audio Closet Cabinet (Red)
  - Use to mount SIGA-APS for remote use with distributed amps (SIGA-AAxx series) or Integrity Signaling Appliances



# RACCR

**2-PPS**

**SIGA-AAxx**

**SIGA-**  
**AAxx**

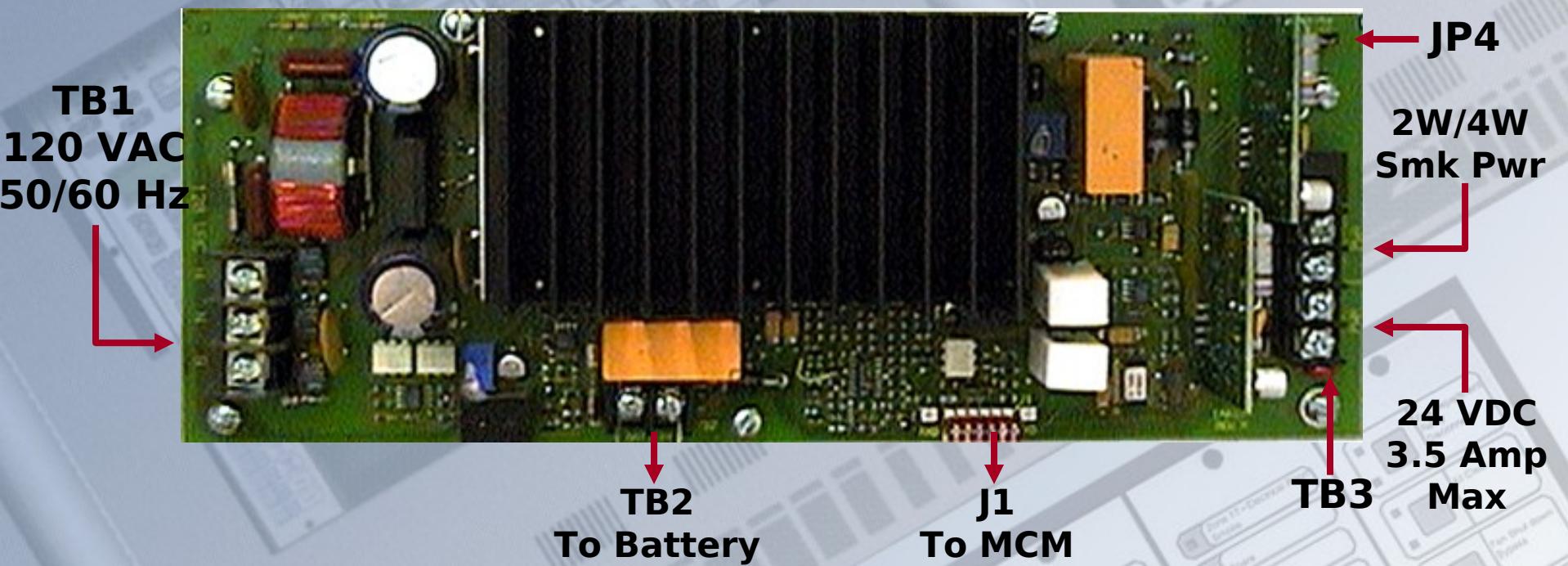
**Battery**

**Remote Audio Closet Cabinet Supports:**

**1 ea. 2-PPS Power Supply**

**2 ea. SIGA-AAxx Amplifiers**

# 2-PPS Primary Power Supply



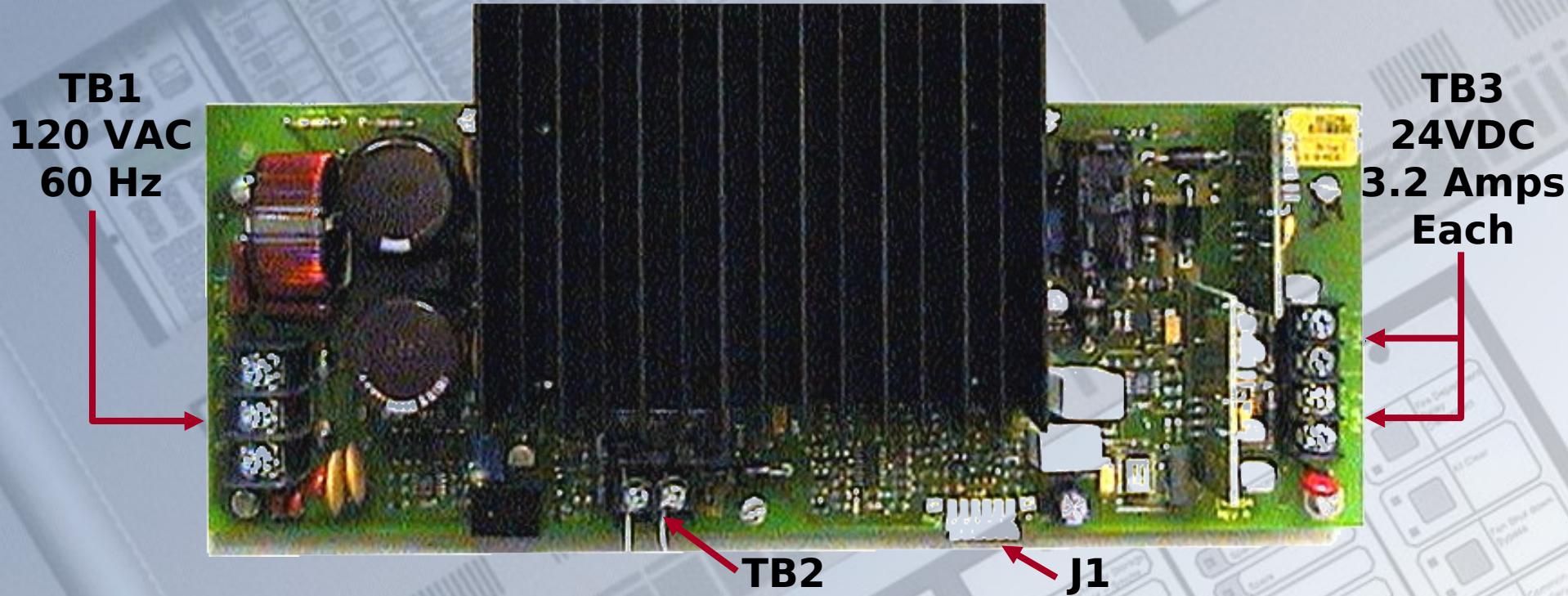
1. TB1 - Connects 120 VAC 50/60 Hz primary power.
2. TB2 - Connects Batteries to charger.
3. TB3 - Power Limited 24VDC output terminals.

Top Half - 24VDC 500ma for 4-wire smokes or 2-wire smokes

Bottom Half - 24VDC 3.5A for hardwired NAC's on 2-MCM or 2-LCX.

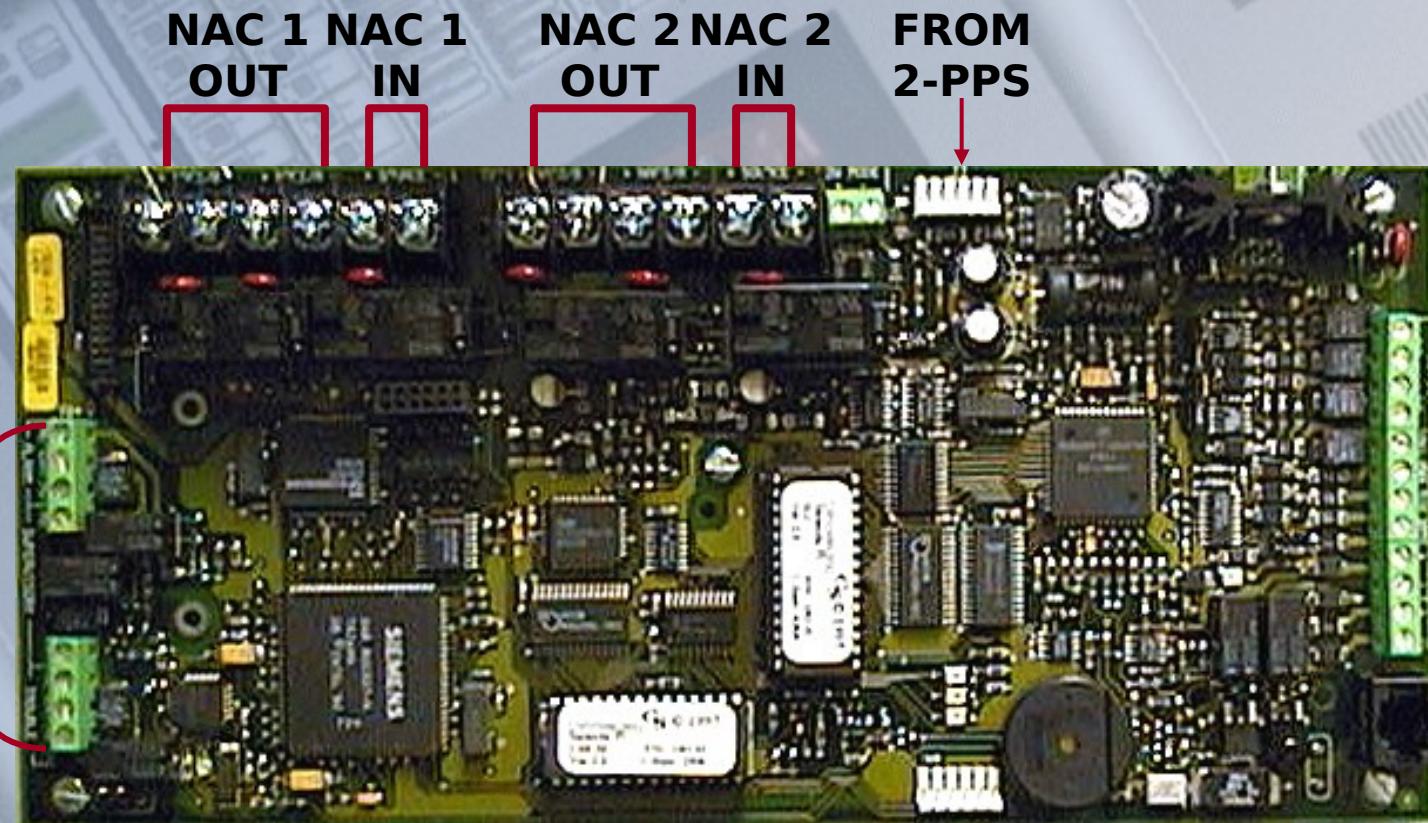
4. J1 - Ribbon cable connection to 2-MCM.
5. Ground Fault testing is performed by the power supply.

# 2-PPS/6A Primary Power Supply



1. **TB1 - Connects 120 VAC 60 Hz primary power.**
2. **TB2 - Connects Batteries to charger.**
3. **TB3 - 24VDC 3.2 Amps output terminals.**
4. **J1 - Ribbon cable connection to 2-MCM.**
5. **The supply powers system electronics and provides power limited outputs for the NAC's. Ground Fault testing is performed by the power supply.**

# 2-MCM Main Control Module



Alarm, Supervisory  
and Trouble  
Contacts

TO  
2-LCX

**NOTE: The 2-MCM provides plug-in points for the DL2 Dialer and a RS-485 Isolator card**

# **2-MCM Main Control Module**

**The 2-MCM is actually two computers in one.**

**1. The Control CPU which receives all inputs and determines outputs.**

**2. The Signature Loop Controller (SLC) which performs two functions:**

**a. Communicates and controls all the Signature Devices on the Signature data line.**

**b. Interfaces with the Control CPU by transmitting and receiving data concerning the Signature Devices.**

# **2-MCM Main Control Module**

## **2-MCM Control Module**

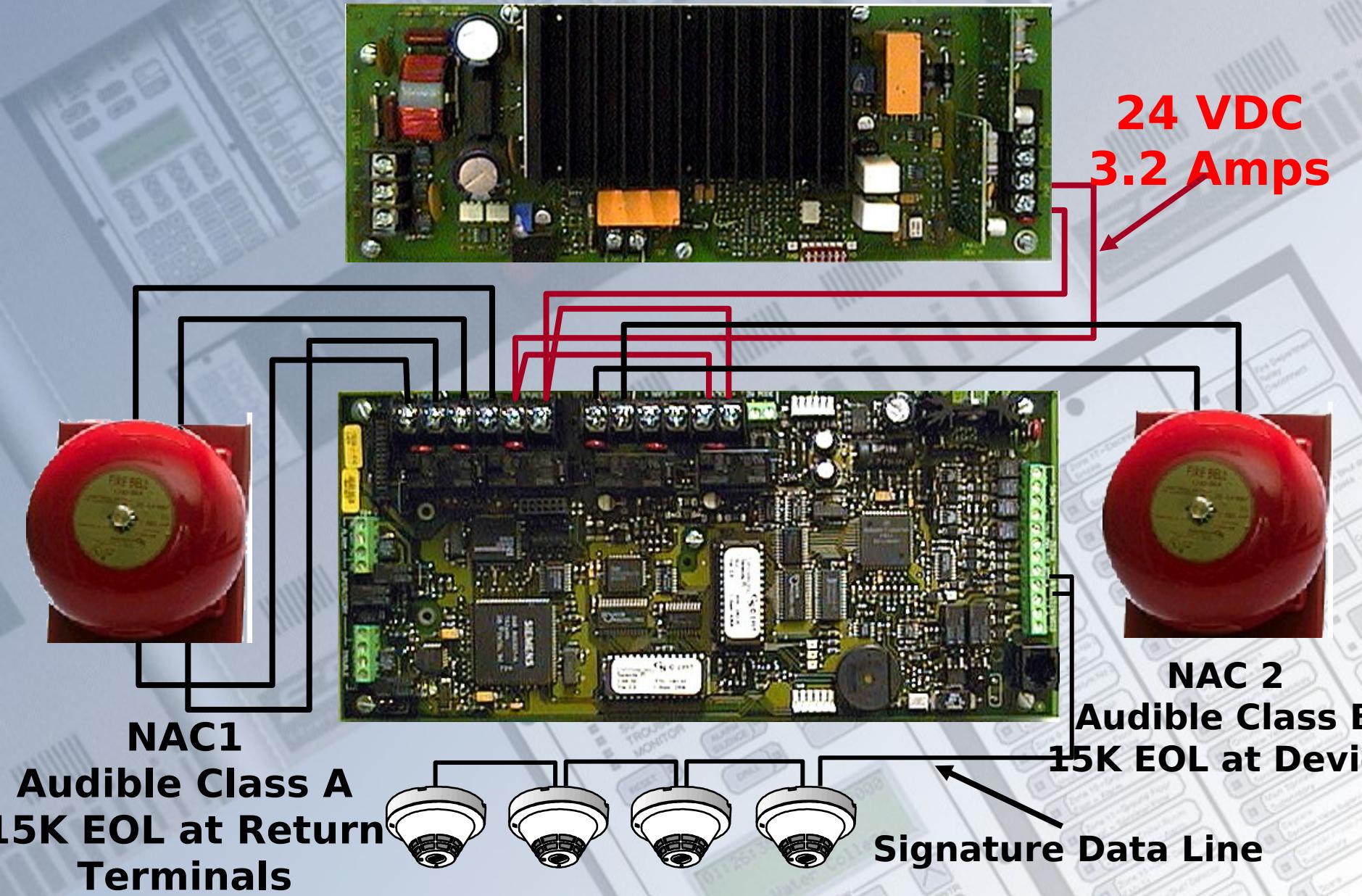
### **A. Signature Loop Controller**

- 1. Supports 96 Signature Detectors  
Supports 94 Signature Modules**
- 2. Provides RS-232 and RS-485 terminals**

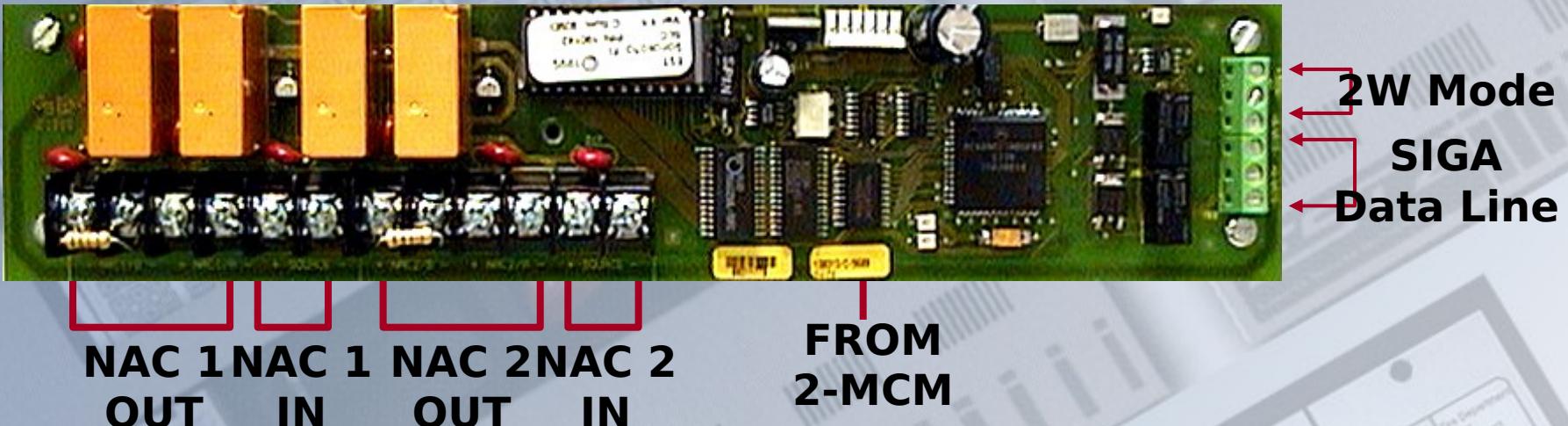
### **B. Two hardwired NAC Circuits**

- 1. Defaulted audible**
- 2. Class A or Class B**
- 3. EOL Class A or Class B 15K Ohms**
- 4. Maximum resistance and capacitance same as 2-MCM MLCI**

# 2-MCM/2-PPS Application



# 2-LCX Expander Loop Module

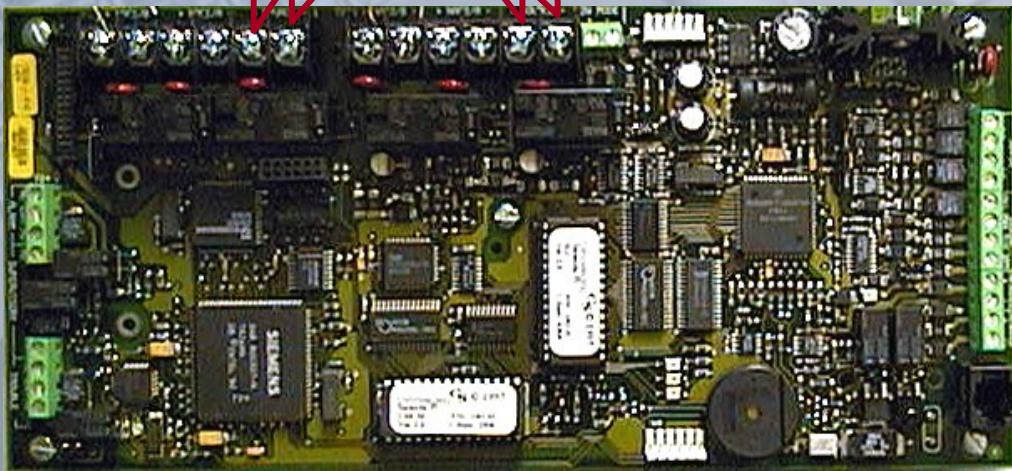


## -LCX Expander Loop Module

### A. Additional Signature Loop Controller

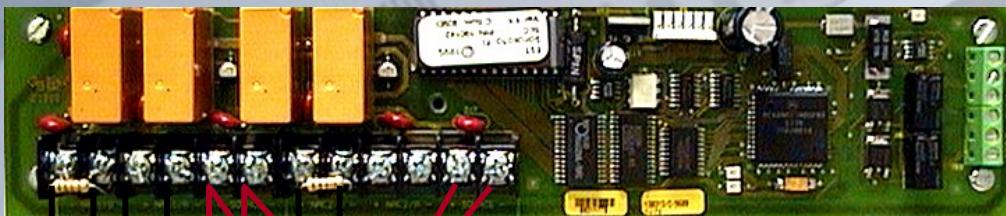
1. Interfaces with 2-MCM Control CPU.
2. Supports **96 Signature Detectors**,
3. Supports **94 Signature Modules**
4. **Two hardwired NAC Circuits**
5. Defaulted audible
6. Class A or Class B
7. EOL Class A or Class B 15K Ohms
8. Maximum resistance and capacitance same as 2-MCM NAC's.

**24 VDC  
From 2-PPS**



**NAC1**  
**Audible Class A**  
**15K EOL at Return**  
**Terminals**

**NAC 2**  
**Audible Class B**  
**15K EOL at Device**



**Signature Data Line**

*Objects*

*Labels*

*Rules*

# EST2 System Optional Modules

EST2 Networking

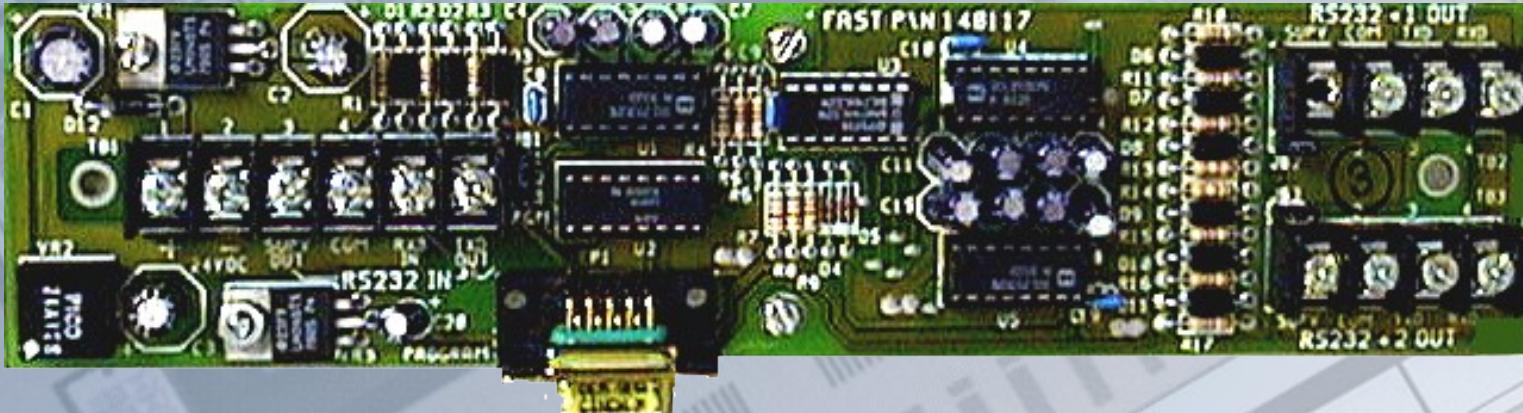
SDU Programming

# MTM March Time Module



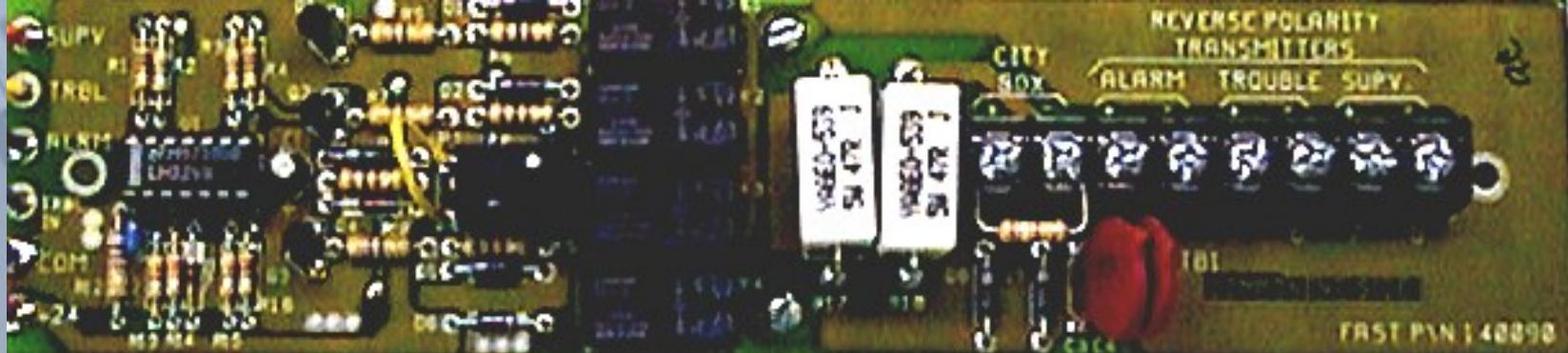
- A. Provides the following tones:**
  - 1. 90 ppm March Time**
  - 2. Temporal**
  - 3. Morse "U"**
- B. Requires 24 VDC for operation**

# IOP3 RS232 Isolator Card



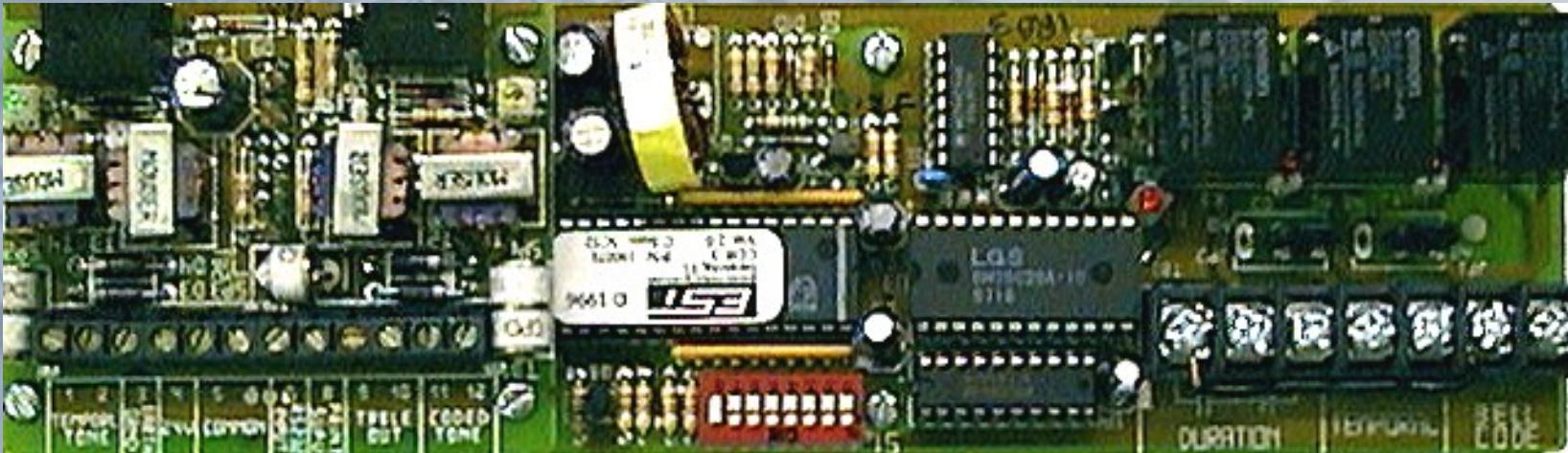
- A. **Isolates the 2-MCM RS-232 port from grounds introduced by peripheral devices.**
- B. **Not required for printers, but recommended.**
- C. **Required for all other RD-232 peripheral devices**

# RPM Reverse Polarity Module



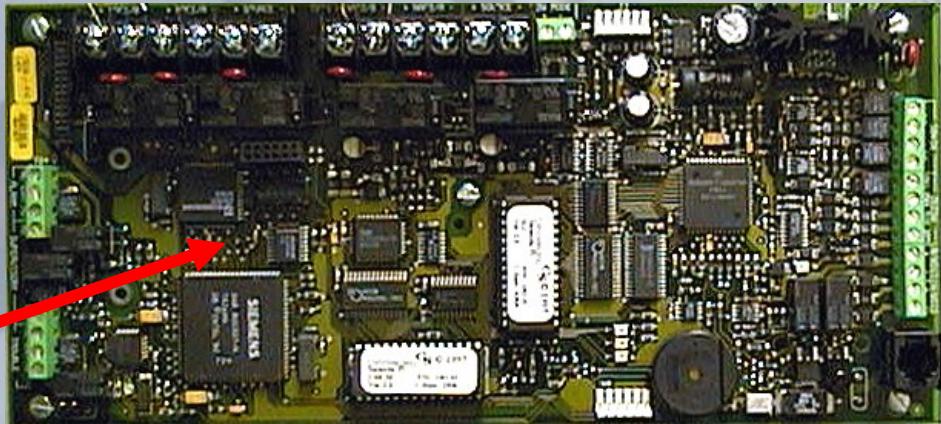
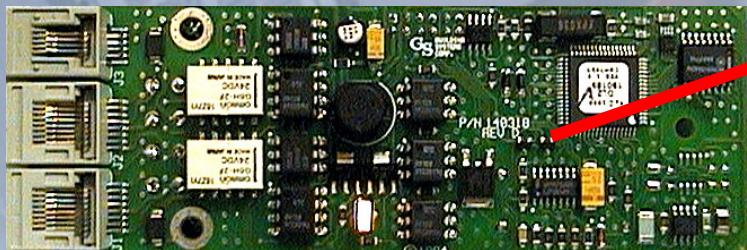
- A. Used for off premise notification.**
- B. Operates in conjunction with the Alarm, Supervisory, and Trouble contacts on the 2-MCM.**
- C. Requires a 2-CTM module when used with a City Box.**

# **CDR-3 Coder**



- A. Used for in systems requiring coded audible devices.**
- B. Output may be coded dry contacts or coded 1KHz tone.**
- C. Code format may be 1 to 4 digits and last 4 rounds.**
- D. Operates on 24VDC.**
- E. Programmable in the EST2 System Definition Utility.**

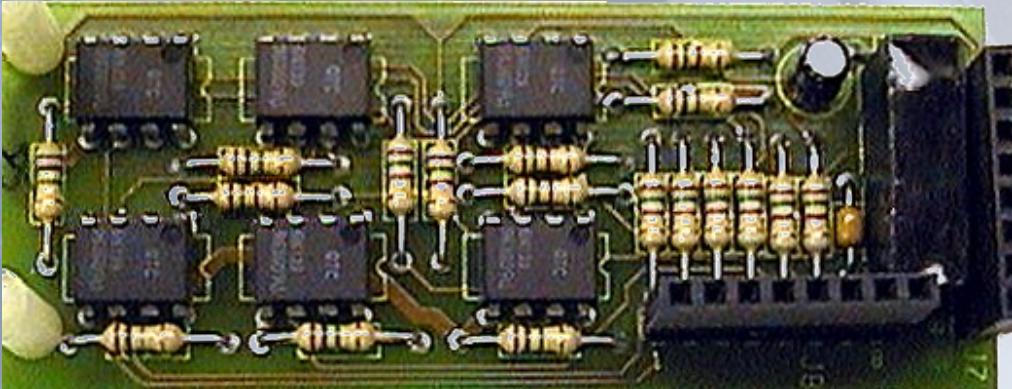
# DL-2 Dual Line Dialer



2-MCM

- A. Digital Alarm Communicator.**
- B. Sends Alarm, Supervisory, and Trouble information to Central Station.**
- C. Dual Telephone Line hook up.**
- D. Supports 20 pps 3/2 and 4/2 formats.**
- E. Self-tests every 24 hours.**
- F. Mounts on 2-MCM.**

# 2-ISO Isolator Module



- A. Mounts directly on the 2-MCM, J7 and J8 jumpers.**
- B. Isolates the 2-PPS from ground faults on the RS-485 Line.**

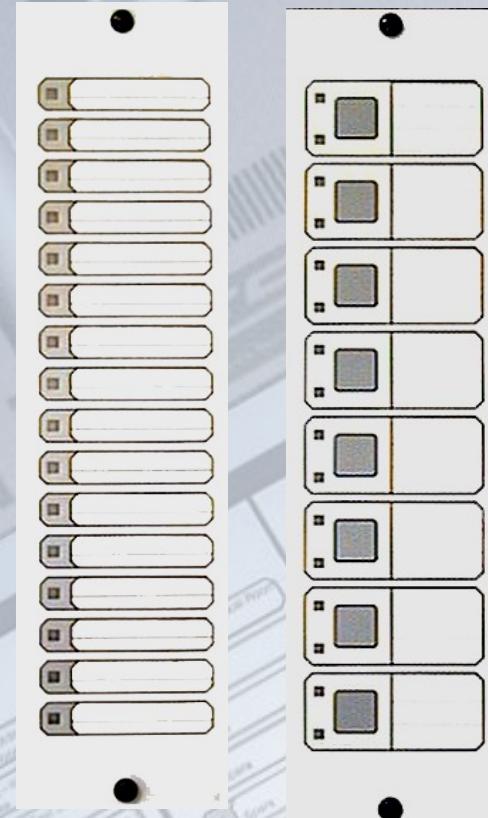
# **2-LED and 2-LED/Switch Panel**

**EST2 Announcer Modules are available in two models:**

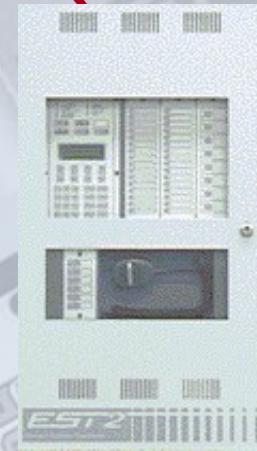
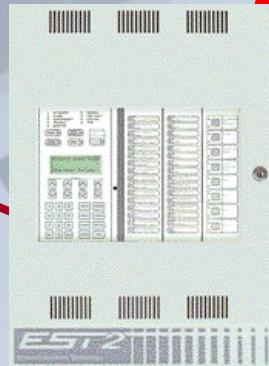
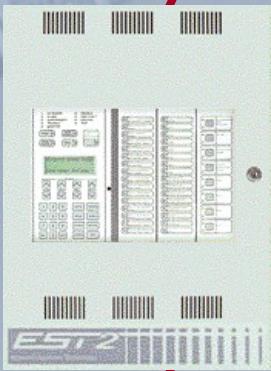
- 1. LED Module - 16 LED's with labels.**
- 2. LED/Switch Module - 16 LED's and 8 Switches with labels.**

**These modules come in several part numbers depending upon the particular LED color desired.**

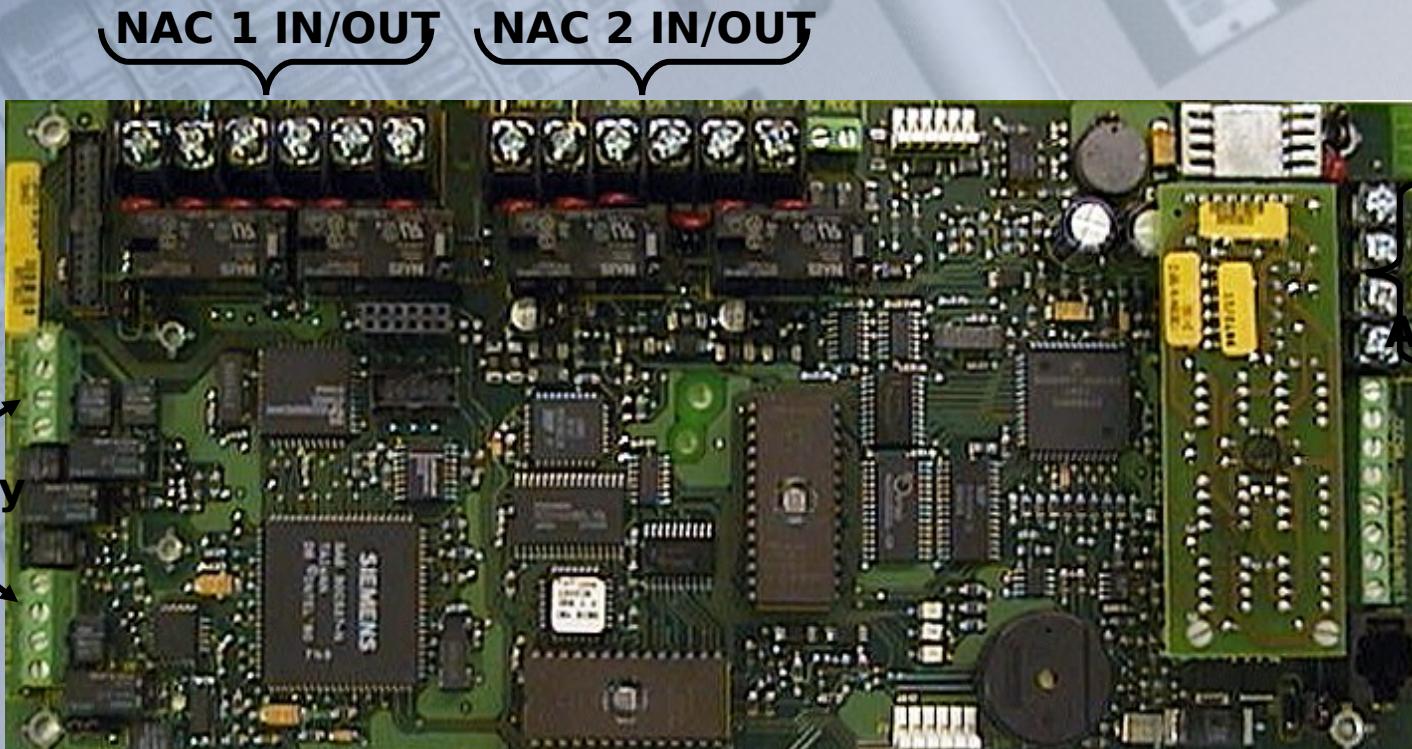
**Red, Green and Yellow are available for the LED Modules. Red and Yellow for LED/Switch Modules**



# *Network Components*



# -MCMN Main Control Module Network



## 1. RS-485 Port is divided.

- Network
- Annunciators

## 2. RS-232 Port

- Printer
- Coder
- Modem

## 3. Signature Data Line

## 4. RJ45 Jack

## 5. Alarm, Supervisory, Trouble Relays

## 6. NAC1 and NAC2

### NOTE

Up to 5 2-MCM(N)'s may be installed on a Network  
Node addresses will be 01 through 05

# 2-CPU Announcer Control Module



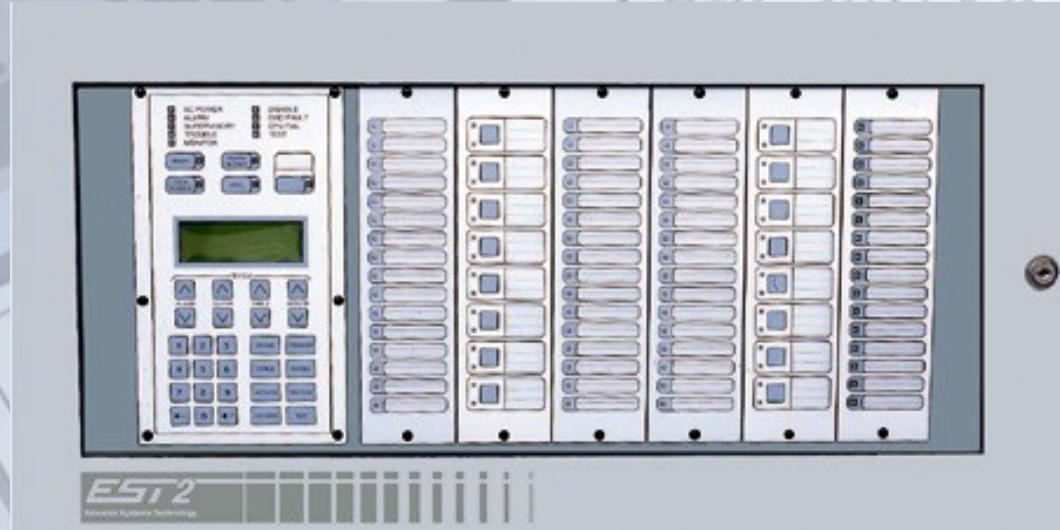
1. Primary interface unit for the EST2 2-ANN Remoter Announcer Panel.  
Requires 24VDC base power supply, with Node 485 addressable Network and Announcer accessories.  
RS-232 port for printer, modem, and download.  
Alarm, Supervisory, and Trouble contacts  
Mounts on the backplate of a Remote Announcer Cabinet.  
Available in two models: 2-3ANN and 2-6ANN.  
2-3ANN, one LCD Display panel and up to three LED/Switch Announciators.  
2-6ANN, one LCD Display panel and up to six LED/Switch Announciators.

# -3ANN/2-6ANN Remote Announcer Pan



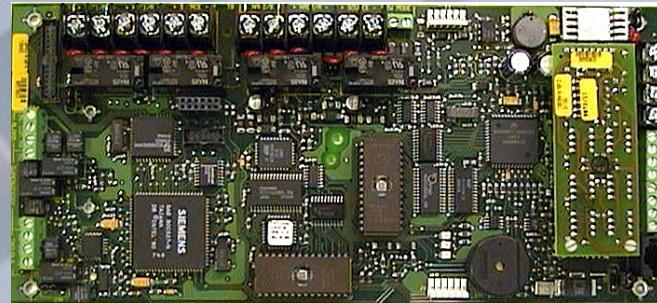
**2-3ANN**

**2-6ANN**

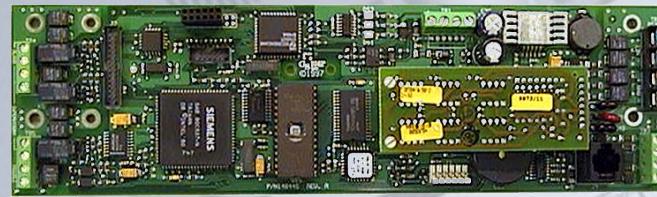


# Class B Network Wiring Configuration

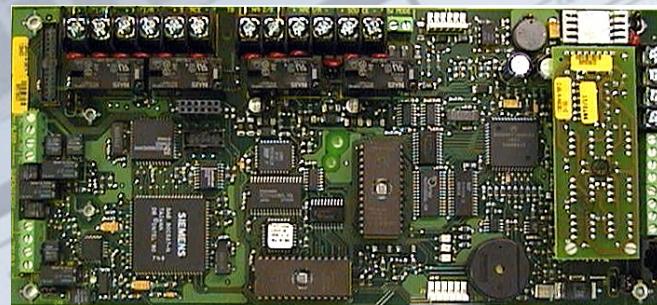
**2-MCM(N) 01**



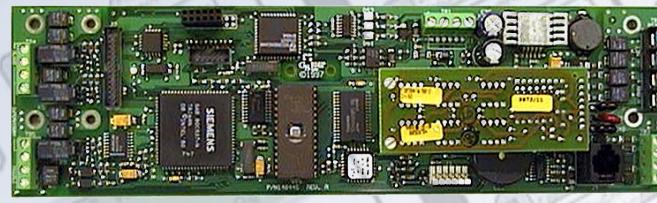
**2-CPU 06**



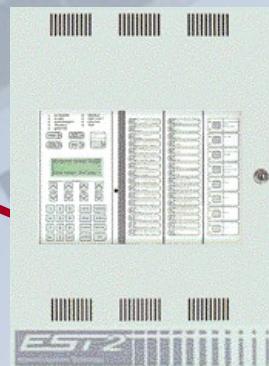
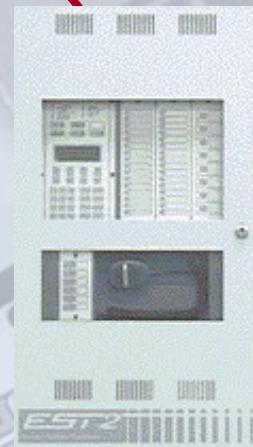
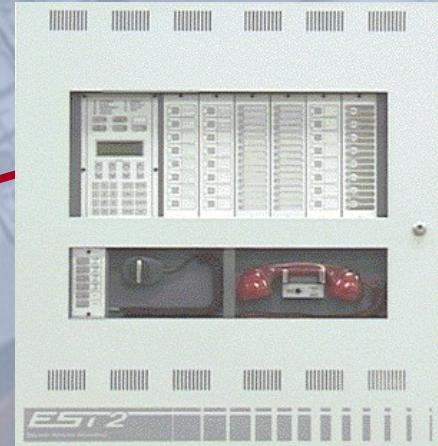
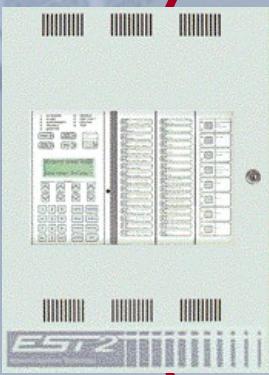
**2-MCM(N) 02**



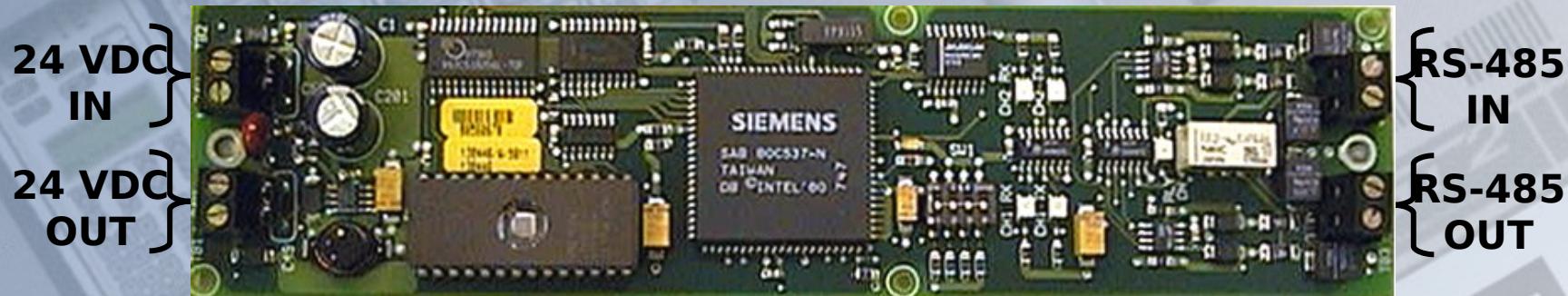
**2-CPU 07**



# *Network Accessories*



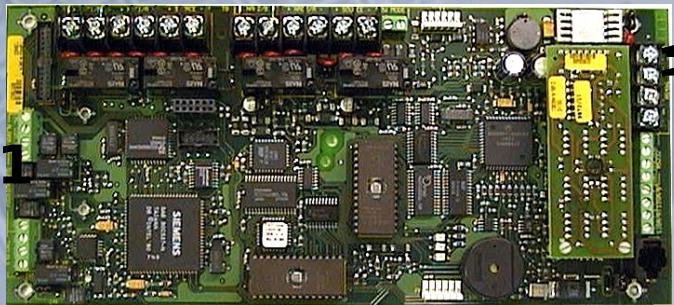
# 2-DLM Data Line Monitor



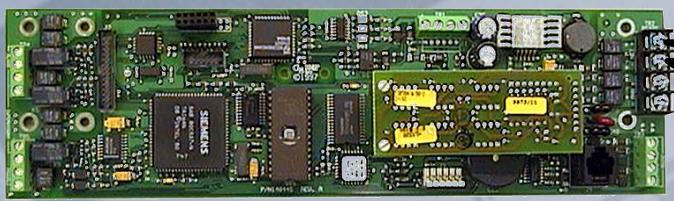
- 1. Designed to provide Class A (Style 6) communications for the EST2 RS-485 risers.**
- 2. Works on both Network or Annunciator RS-485 lines.**
- 3. Requires 24VDC from a remote power supply.**
- 4. Half footprint module:**
  - Snaps on backplate of 2-ANN cabinet.**
  - Snaps on side stand-offs of the 2-WB Series cabinets.**

# Class A RS-485 Network Configuration

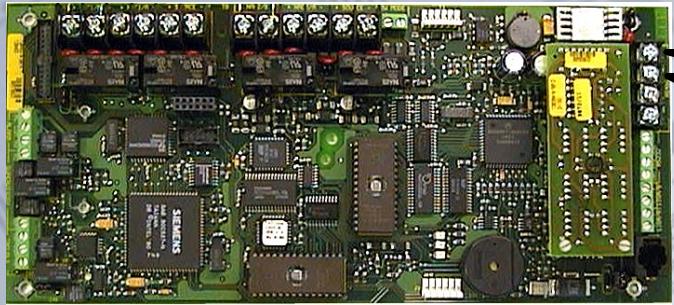
2-MCM(N) 01



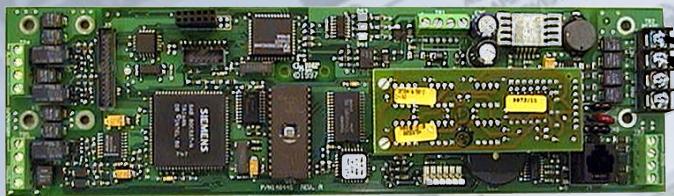
2-CPU 06



2-MCM(N) 02



2-CPU 07

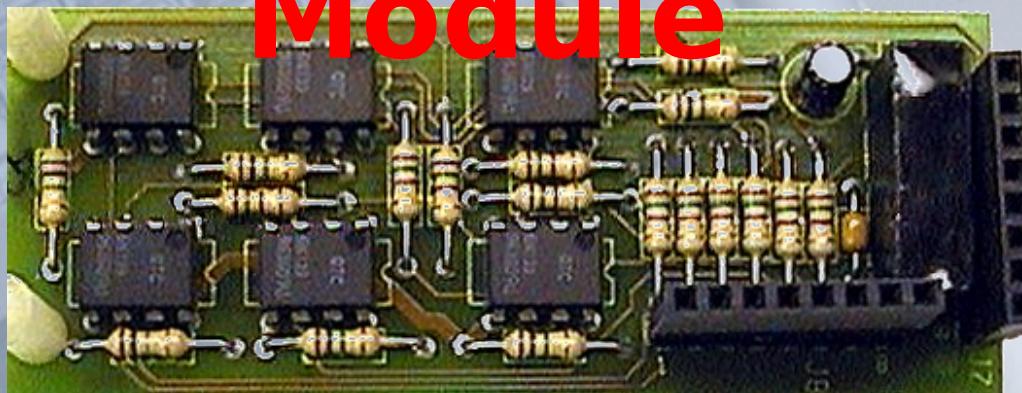


24 VDC



2-DLM

# **2-ISO Isolator Module**



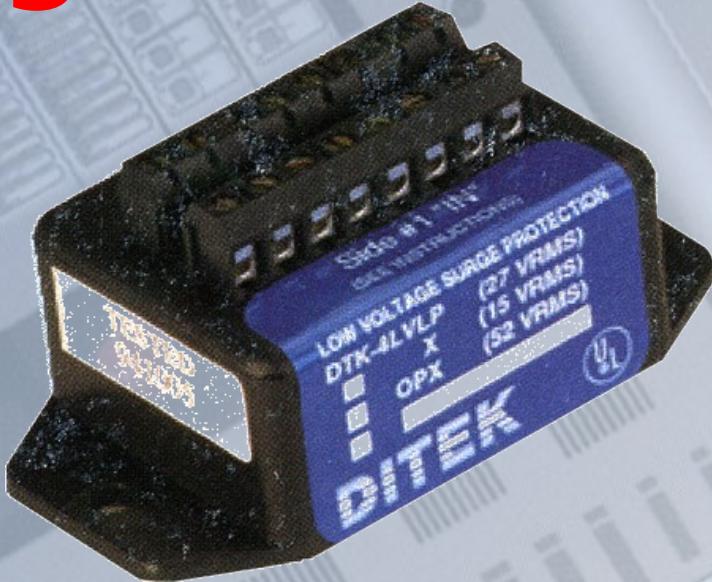
**Provides electrical isolation between the RS-485 Line and the panel's primary power supply.**

**Mounts directly onto a set of jumpers on the 2-MCMN or 2-CPU.**

**In Network configuration, the 2-ISO must be mounted on each 2-MCM(N) and 2-CPU.**

**Included as standard equipment on the 2-MCM(N) and 2-CPU.**

# Ditek Surge Protector Module



- 1. In accordance with NFPA 72, any signaling line circuit exiting one building and entering another must have surge protection at the exit and entrance points.**
- 2. The Ditek Surge Protection Module is designed for surge protection for circuits, fuses, and wiring.**
- 3. It may be mounted in a standard grounded metal electrical box.**

*Objects*

*Labels*

*Rules*

# EST2 System Components

EST2 Networking

SDU Programming